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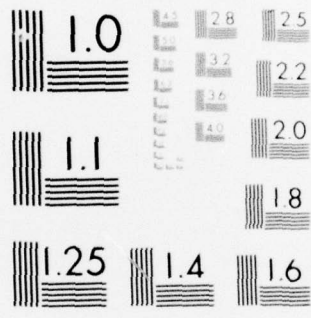
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(6) GUNNERY LAYING BY THE DIRECT  
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A BIBLIOGRAPHY OF BOOK AND  
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BY

(10) LESTER L. MILLER, JR.

(11) 15 DEC. 1977

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## FOREWORD

This bibliography concerns the specific subject of gunnery fire direction known as gun or howitzer laying. The practice of gun-laying was accomplished by point-blank or maximum elevation of fire during the 1700s. The elevating screw was devised in about 1800 which introduced flexibility in direct laying of fire which was made possible through the use of fixed rear sights to fire on specific targets. Corrections were made by observation of prior shots. Today the tangent, telescopic, or other sighting means have replaced the fixed sight.

Indirect gun laying first came into use during 1813 when the British used the principle at the siege of St. Sebastien, Spain. Since that time firing from the defilade (protected) position at a predetermined aiming point so that fire can be shifted to an unseen target has become the standard means of area neutralization. Instruments include the dial sight, the sight clinometer, and the range indicator as modern-day replacements for the old gunner's level.

Emphasis in this number is on the developmental aspects of gun laying including the direct and indirect methods. Materials listed have been selected from book and periodical holdings of the Morris Swett Library.

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER SB 44 ✓	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Gunnery Laying by the Direct and Indirect Method		5. TYPE OF REPORT & PERIOD COVERED Final Report
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Mr. Lester L. Miller, Jr.		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS U.S. Army Field Artillery School Morris Swett Library Fort Sill, OK 73503		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS		12. REPORT DATE 15 Dec 77
		13. NUMBER OF PAGES 10
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) This report is approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES None.		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Bibliographies; Fire Direction Centers; Gunnery		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Various articles covering gunnery fire direction from the historic and current standpoint are included in this listing.		

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